CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : **CP-2019-07-2019-40** **Date: 07-11-18**

Project Name : Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.

Agency : Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045

Customer's Reference : EE(Project)/YnkZone/WO/75/2017-18

Date of Receipt : 05-11-18

Sample Type : Birla Super 53grade

Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
IS 4031 (Part 1,2 3,4,5, 6,11):1988
IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4
IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5
IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5
IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6

Sm. Executive Engineer Project Division Yelahanka Zone Bangalore

Date of test : 05-11-18

Environmental Conditions during test : Temperature: 26°C
Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.15	–
2	Finess by Air permeablity method (m^2/kg,Min)	285.5	225m^2/kg, Min
3	Density (gm/cc)	3.13	–
4	Standard Consistency (%)	27.0%	Not specified
5	Initial Setting time	165 minutes	Not less than 30 minutes
6	Final Setting time	255 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	2.0mm	Not more than 10 mm

AE

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Date: 03-12-18

Lab ID	:	**CP-2019-07-2019-40**
Project Name	:	Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.
Agency	:	Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045
Customer's Reference	:	EE(Project)/YnkZone/WO/75/2017-18
Date of Receipt	:	05-11-18
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, Determination of Compressive Strength, Clause 6
Date of test	:	05-11-18
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Compressive Strength			
No.	**Physical properties**	**Results**	**Requirement as per IS 12269: 2013**
1	3 Days	29.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.5N/mm^2	Not less than 37 N/mm^2
3	28 Days	56.5N/mm^2	Not less than 53 N/mm^2

AE

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2019-07-2019-40** **Date: 07-11-18**
Project Name	:	Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.
Agency	:	Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045
Customer's Reference	:	EE(Project)/YnkZone/WO/75/2017-18
Date of Receipt	:	05-11-18
Sample Type	:	40mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	04-11-18

Executive Engineer Project Division Yelahanka Zone Bangalore

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total Weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	322	322	2.1	97.9	90-100
3	20 mm	5643	5965	39.8	60.2	30-70
4	10 mm	4663	10628	70.9	29.1	10-35
5	4.75 mm	4025	14653	97.7	2.3	0-5
6	Pan	347	15000	100.0	0	---

AE

CIVIL PRO Sig..... Date..... BANGALORE

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2019-07-2019-40** **Date: 07-11-18**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.6	
3	Specific Gravity	2.68	_
4	Bulk Density(Loose) (Kg/l)	1.55	_
5	Bulk Density(Compacted) (Kg/l)	1.59	_
6	Water Absorption(%)	0.21	_

Asst. Executive Engineer Project Division Velahanka Zone Bangalore

AE

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2019-07-2019-40** **Date: 11-11-18**
Project Name	:	Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.
Agency	:	Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045
Customer Reference	:	EE(Project)/YnkZone/WO/75/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	05-11-18
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	04-11-18

Asst. Executive Engineer Project Division Yelahanka Zone Bangalore

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	243	243	4.9	95.1	90-100
3	10 mm	2544	2787	55.7	44.3	25-55
4	4.75 mm	1768	4555	91.1	8.9	0-10
5	Pan	445	5000	100	0	–

AE

CIVIL PRO Sig..... Date..... BANGALORE

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2019-07-2019-40** **Date: 11-11-18**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.4	
3	Specific Gravity	2.65	_
4	Bulk Density(Loose) (Kg/l)	1.47	_
5	Bulk Density(Compacted) (Kg/l)	1.49	_
6	Water Absorption(%)	0.2	_
7	Aggregate crushing Value(%)	22.4	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	21.8	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

AE

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signature
Quality Manager

End of Report

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2019-07-2019-40** **Date: 07-11-18**

Project Name : Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.

Agency : Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045

Customer's Reference : EE(Project)/YnkZone/WO/75/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 05-11-18

Sample Type : Fine Aggregate

Reference to BIS codes : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption

Asst Executive Engineer Project Division Yelahanka Zone Bangalore

Date of test : 04-11-18

Total weight taken : 1000 grams

Sl.no	Sieve size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	86	86	8.6	91.4	90-100	90-100	90-100	95-100
3	2.36 mm	144	230	23.0	77.0	60-95	75-100	85-100	95-100
4	1.18 mm	175	405	40.5	59.5	30-70	55-90	75-100	90-100
5	600 micron	179	584	58.4	41.6	15-34	35-59	60-79	80-100
6	300 micron	185	769	76.9	23.1	5-20	8-30	12-40	15-50
7	150 micron	132	901	90.1	9.9	0-10	0-10	0-10	0-15
8	Pan	99	1000	100.0	0.0	---	---	---	---

Result :The tested Sample Conforms to Grading Zone II

AE

CIVIL PRO Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2019-07-2019-40** **Date: 07-11-18**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.75	_
2	Specific Gravity	2.56	_
3	Material finer than 75 micron(%)	4.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

AE

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Format No: CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID	:	**CP-2019-07-2019-40** **Date: 15-11-18**
Project Name	:	Package-3 A) Construction of Hospital building at ward No.11, Kuvempunagara. B) Construction of Hospital building at Ward No.07, Byatarayanapura. C) Construction of Hospital Building at Ward No.08, Kodigehalli.
Agency	:	Sri.K.Gopireddy, #3, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranna Palya, Arabic Collager Post, Bangalore-560045
Customer's Reference	:	EE(Project)/YnkZone/WO/75/2017-18
Date of Receipt	:	12-11-18
Sample Type/Size	:	Solid concrete blocks size (400X200X200)mm
Reference to BIS codes	:	IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex -C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
Date of test	:	12-11-18

Asst. Executive Engineer Project Division Yelahanka Zone Bangalore

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	402	200	202	16241	32.510	2001.7	1986.0	Not less than 1800Kg/m^3
2	403	203	203	16607	32.470	1955.2		
3	403	201	201	16282	32.580	2001.0		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.470	32.380	3.37	3.90	Shall not be more than 10% by mass
2	33.560	32.320	3.84		
3	33.540	32.100	4.49		

AE

CIVIL Pro Sig..... Date..... BANGALORE

Lab ID : **CP-2019-07-2019-40** **Date: 15-11-18**

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	402	202	203	Length : ± 5mm Breadth : ± 3mm Height : ± 3mm
2	401	201	201	
3	402	203	203	
4	401	201	201	
5	402	203	203	
6	404	201	201	
7	401	203	203	
8	403	201	201	
9	402	203	203	
10	401	202	201	
11	402	201	203	
12	403	203	202	
13	401	201	201	
14	402	203	203	
15	402	202	203	
16	401	103	202	
17	402	200	201	
18	403	203	203	
19	403	201	201	
20	401	201	203	
Average of 20	**402**	**197**	**202**	

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

AE

CIVIL PRO
Sig.....
Date.....
BANGALORE

Lab ID : **CP-2019-07-2019-40** **Date: 15-11-18**

COMPRESSIVE STRENGTH:

Sl. No.	Size of solid block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm^2)	(KN)	N/mm^2	(N/mm^2)
1	402	202	81204	428.7	5.3	5.5
2	401	201	80601	444.7	5.5	
3	402	203	81606	458.1	5.6	
4	401	201	80601	439.7	5.5	
5	402	203	81606	461.5	5.7	
6	404	201	81204	448.1	5.5	
7	401	203	81403	472.0	5.8	
	403	201	81003	448.5	5.5	

Asst. Executive Engineer Project Division Yelahanka Zone Bangalore

As per IS Requirements (Table 2, Clause 5.1, 5.2 and 9.4)

Compressive strength		
Grade	**Minimum average**	**Minimum Individual units.**
C (5.0)	5.00 N/mm^2	4.00 N/mm^2
C (4.0)	4.00 N/mm^2	3.20 N/mm^2

AE

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT